

ABSTRACT

Reinforced, laminated, impregnated, and materials with composite properties as
5 cross linked polyvinyl alcohol hydrogel structures in bulk or cellular matrix forms that
can take essentially any physical shape, or can have essentially any size, degree of
porosity and surface texture. They have a wide range of physical properties, unusual and
unique combinations of physical properties and unique responses to stress fields, which
allows for their use in many end use applications.